Japanese and Finnish data banks which indicate that the annual risk of bleeding from unruptured aneurysms is as high as 3.2% in Japan and 1.3% in Finland, and that this risk varies according to a number of risk factors, but most importantly female gender and cigarette smoking (at least in Finland). Several papers speculate on aneurysm rates of growth and rupture, and the influence of the "perianeurysmal environment" on rupture risk, both interesting concepts. Finally, the surgical and endovascular results of several case-series are presented (as expected, better than those of ISUIA).

The second part of this supplement, made up of eight papers, is a mish-mash, dealing with different aspects of subarachnoid hemorrhage, each a subject of interest to devoted aneurysm therapists (not all surgeons, remember): the elderly patient (don't hesitate – operate!), massive middle cerebral aneurysm hemorrhages (same advice), "negative-angiography" subarachnoid hemorrhage (nonperimesencephalic-type hemorrhages need repeat catheter angiography), neuropsychological outcome after aneurysm rupture (this perhaps the only report on this subject you will want to read – anterior communicating aneurysms had the best cognitive outcome?), near infrared spectroscopy monitoring of cerebral hemodynamics after subarachnoid hemorrhage, and clinical experimentation with hypothermia in the management of severe subarachnoid hemorrhage (these last two subjects rather experimental).

The last chapter is a concise and beautifully-illustrated contribution from a master and Yasargil's successor in Zurich, Professor Yonekawa, on strategies for the surgical management of posterior circulation aneurysms. A dying, but not yet lost, art.

The price is reasonable for the high-quality publication that we are used to from Acta, the English spotty in places for those who notice such things (and are, therefore, probably frowning at this review), but overall and most importantly I don't think there is enough new or otherwise unpublished information in this supplement to warrant its purchase for those persons or libraries not otherwise subscribing.

J. Max Findlay
Edmonton, Alberta

INTENSIVE CARE IN NEUROSURGERY. 2003. Edited by Brian T. Andrews. Published by Thieme. 256 pages. C$200

The practice of neurointensive care has become increasingly complex as mechanisms of acute neurologic illnesses and their potential treatments outside of the operating room are discovered. As the number of neurosurgeons and neurologists involved in direct critical care management of their patients grows, so does the requirement for adequate understanding of bedside physiologic monitoring techniques and specific therapies for hemodynamic, pulmonary as well as neurologic deterioration.

Intensive Care in Neurosurgery is a concise, but fairly comprehensive text on the management of neurosurgical patients in the intensive care unit. The scope of the text is impressive, and includes chapters on fluid, electrolyte and acid-base balance, as well as metabolic, nutritional and endocrine aspects of neurosurgical ICU care. The book is multi-authored and divided into 18 chapters which are accompanied by sufficient informative tables and figures. The first four chapters deal with physiology and monitoring: pulmonary, cardiovascular, neurological and cerebrovascular. The chapter entitled "Cerebrovascular Pathophysiology and Monitoring in the Neurosurgical Intensive Care Unit" is particularly comprehensive with short descriptions of all current techniques for measuring cerebral hemodynamics, including calculations and normal values. The majority of remaining chapters deal with specific neurologic disease entities including infection, head, spinal cord and multisystem injury, subarachnoid hemorrhage, nontraumatic hemorrhage, stroke, epilepsy and brain tumors. The chapter entitled "Infectious Disease" is an excellent source of current knowledge on common and more rare types of central nervous system infection including prion, fungal and parasitic infections as well as HIV. The chapter "Multisystem Injury Management" is unique in pulling together pathophysiology and management for a variety of post-injury complications involving all major systems. The pediatric section includes a useful description of pharmacologic agents and techniques for mechanical ventilation which is unfortunately absent from the adult section. The book finishes with a useful discussion of withdrawal of life support, including a description of landmark case decisions and clinical aspects. The final chapter, on declaration of brain death is an excellent reference on a frequently practiced, but often poorly performed exercise.

This book is well-organized and quite readable with little repetition. The text contains a large amount of useful information important in decision-making processes in neurocritical care. The information is current and focuses on evidence-based medicine to the extent possible in a field often reliant on anecdotal experience. For topics not covered in adequate detail, readers will find the indexing sufficient to locate more in-depth reviews. It should appeal to neurosurgeons, neurologists, ICU practitioners and trainees caring for neurosurgical patients in the ICU. Although several of the chapters can be found in more explanatory neurosurgical or intensive care textbooks, the authors avoid the pitfall of inundating the busy neurosurgeon/intensivist with detailed pathophysiological explanations that distract from the clinical orientation of the text. This is not easy, but is inherent in a book that tries to address problems encountered by two populations of specialists with different training and reflexes. The book successfully brings together the advancements in the field and should assist in advancing the intensive care of neurosurgical patients.

Wendy C. Ziai
Baltimore, Maryland, USA

CANCER NEUROLOGY IN CLINICAL PRACTICE. 2003. Edited by David Schiff and Patrick Y. Wen. Published by Human Press, Totowa NJ. 464 pages.

Drs. Schiff and Wen have compiled an extensive compendium of neurological complications of systemic cancer in 31 chapters written by 50 active researchers and clinicians in the field. Many of the authors are neurologists, some neuro-oncologists, and all have extensive experience. The product is an excellent survey of the basic and clinical science of problems that add the complexity of neurological symptoms to the already difficult issue of managing patients with cancer. By placing the material into one volume, the book offers the clinician a ready source to look up a specific problem or review a topic in detail. The only primary central nervous system (CNS) tumor discussed (minimally) is primary CNS lymphoma; otherwise the book is devoted to neurologic problems of systemic

cancer.

The book is divided into sections. First is a survey of neuro-oncologic symptoms. This section is followed by chapters on the direct and indirect neurological complications of cancer and complications of therapy. A final large section concentrates on neurological complications of cancer of specific organs. While this structure produces considerable overlap, it allows the reader the choice of looking subjects up without having to skip back and forth in the book. Overall the technique works.

As in most multi-authored books, there is variation in the quality of the writing among the chapters. Many are superb reviews of the subject matter, covering both the science and the clinical material. Especially noteworthy are:

Chapter 7 on brain metastases, which is well-written, thorough, and well-referenced.

Chapter 14 on sequelae of radiotherapy is an excellent review with good clinical descriptions. The scientific basis for the neurological damage is well-presented, and the references are complete. The chapter is nicely laid out.

Chapter 19 on imaging is excellent with many good pictures of metastases, infections, and toxicity of therapy. The subject of spinal disorders is well-covered.

Chapter 20 on lung cancer is very well-written. While it largely duplicates previous chapters, it will likely be the first place a clinician will look who has a lung cancer patient with neurologic complications. The radiosurgery discussion is valuable but will need upgrading in the near future.

Also noteworthy are chapters on breast cancer, pediatric tumors and leptomeningeal metastases (although a few odd abbreviations like "approx" should have been avoided).

In contrast, some of the chapters are not particularly well-presented:

Chapter 4 on headache has several problems. "Plateau waves" are not defined. The subject of colloid cyst references plateau waves in a "recent" reference #82 which was published in 1973. There is no mention of headache after jugular vein resection in radical neck resection. Paroxysmal headache (pressure wave) is equated in colloid cysts with plateau waves, which I suspect are not the same. Table 7 includes some causes for headache that are a bit of a reach, e.g. many chemotherapy drugs and radiotherapy. I suspect that for a larger number of patients, benign headaches, e.g. migraine, are more common.

Chapter 11 on neuromuscular disease and its complications is a mixture of symptoms, anatomic structures, syndromes and etiologies, making for difficult reading. There are odd associations, e.g. Table 1 has post-irradiation ALS-like MND first, paraneoplastic LMN disease second, while the text reverses them. There are too many abbreviations even when the term is used only once; e.g. "MGUS" and "CMAP" are never defined.

Chapter 12 on cerebrovascular complications of cancer consists of a catalog of diseases and syndromes without discrimination. However, several points should have been emphasized that were not:

- DIC presents as an encephalopathy while NBTE presents as large vessel strokes.
- A common cause of DIC in cancer patients is gram-negative sepsis associated with chemotherapy-induced leucopenia.
- Thrombocytopenia is a cause of subdural hematoma.
- There is no mention of subarachnoid hemorrhage from any cause.

Chapter 13 on paraneoplastic syndromes of the nervous system is a superficial rendering with too much emphasis on rarer conditions in a field of already rare disorders. For example Figure 2 shows immunolabeling of rat cerebellum with anti-Tr antibodies, a much more rare association with paraneoplastic cerebellar degeneration (PCD) (with Hodgkin's Disease) than the commoner anti-Yo antibody associated with ovarian or breast CA. There should have been a figure of cerebellum from a typical patient showing loss of Purkinje cells. Stiff-man syndrome is usually not paraneoplastic, yet is discussed more than PCD. Furthermore, there is no discussion of the science of these disorders, e.g. the relationship of cancer to the CNS events and especially the findings of common antigens in tumor and CNS. The case descriptions are poor. A description of LEMS might have included a "middle aged man with proximal limb weakness, dysphagia, etc, who has lung cancer."

Some chapters need better editing:

Chapter 5 on confusion and delirium is generally well-written, with a good reference list. However, Tables 5 & 6 do not follow the text very well.

Chapter 30 on head and neck cancers was written by four authors, but much of the material was borrowed from a 1995 book. Unfortunately, some editing errors were not picked up, e.g. reference 85 is incomplete. There is a good discussion on carotid artery problems associated with neck dissociation and radiotherapy complications. One problem identified here but common to several of the chapters is the appropriate inclusion of esthesioneuroblastoma in the chapter, but its absence in the index. Several entities in other chapters are also not included in the index.

The other chapters are generally well-written and well-referenced.

One question is to whom the book is directed. While the authors identify the "clinician" as the target reading audience for the book, the actual buyer is not clearly so obvious. Potential readers include neuro-oncologists, neurologists, medical oncologists, radiation oncologists and neurosurgeons:

- Neuro-oncologists. While this reviewer enjoyed reading the book because it was written in major part by neuro-oncologists, others are likely to go to primary sources. The fact that the book is poorly indexed makes it difficult to look up uncommon problems. Several references are also out of date.
- Neurologists. The book is pretty good for general neurologists because in addition to the neurological discussions, the main cancer chapters summarize their non-neurologic points well. The book is a very good source as initial contact to the subject for neurology residents.
- Medical Oncologists. The book is not particularly good for such physicians. The cancer summaries are too limited and the neurological descriptions often not written well enough to provide good guidelines or advice. This reviewer would be pleased if one outcome of reading this book is that the medical oncologist learns when to call on a neuro-oncologist. In that respect the book does very well.
- Neurosurgeons. Since there is little attention to primary CNS tumors there are too few topics of interest for the neurosurgeon, who would likely use primary neurosurgical sources.
- Radiation Oncologist. The book is unlikely to appeal to such physicians, who would likely prefer the radiation oncology primary literature.

This reviewer liked the book and plans to use it to teach

neurology residents about neurological complications of systemic cancer. The book might profitably also find itself on the bookshelf of neurologists and those medical oncologists who must also perform as neuro-oncologists in their practices.

William R. Shapiro
Phoenix, Arizona, USA

A Clinical Gudie to Inherited Metabolic Diseases. Second Edition. 2002. Edited by Joe T.R. Clarke. Published by Cambridge University Press. 289 pages. C$63.00

The field of inborn errors of metabolism (IEMs) has evolved significantly in the past decade largely due to technologic advances in diagnostic testing, newborn screening, and a particularly close linkage and rapid deployment of molecular based information related to these disorders. Nowhere is this reflected more dramatically than in the growth of the standard textbook in the field, *The Metabolic and Molecular Bases of Inherited Disease*, edited by Scriver and colleagues, which (along with its on-line counterpart) attempts the daunting task of integrating nearly all aspects of the basic science study of IEMs with the clinical information necessary to diagnose and treat patients with these disorders. Moreover, the focus of early editions of the text has been blurred in order to expand its scope to review all disorders for which significant molecular information is available. The result is a nearly 16 kg, four-volume tome, that is unrivaled as a reference source, but is nearly unassailable to trainees in the field or other readers with more casual (or practical) interests. Enter Dr. Clarke's text, *A Clinical Guide to Inherited Metabolic Disease*. At a svelte 610 gm (in paperback) and 289 pages, it attempts to capture the core principles of the field into a format more useful to entry-level students, especially house officers and clinical trainees.

Texts on IEMs in general take on one of two formats. The first, as typified by the Scriver volumes, compiles information mostly by metabolic pathway and disease, and thus are best suited to review of topics in the context of patients with known disorders. In his text, Dr. Clarke employs the alternative approach, a problem oriented overview that provides a framework for evaluating patients with unknown disorders, and then moves to a symptom based emphasis on therapy. Chapters in the book, therefore, represent essentially entry points into the differential diagnosis of patients with a specified clinical presentation such as metabolic acidosis, predominantly hepatic symptoms, predominantly neurological symptoms, etc. An inescapable result of this approach is the appearance of entries for individual disorders in multiple locations throughout the text, making it more difficult to gain a broader perspective on a single disease entity. A new chapter on newborn screening is a welcome addition to the previous edition that nicely summarizes many of the new issues related to this contentious topic.

From a factual standpoint, there is little to quibble with in this text. On first review, only one minor error was obvious, the perpetuation of the mis-identification of patients with "long chain acyl-CoA dehydrogenase deficiency," a problem shared by many current texts and reviews on mitochondrial fatty acid oxidation. Since patients originally identified with this disorder were shown ten years ago to have instead very long chain acyl-CoA dehydrogenase deficiency, no *bone fide* defects in long chain acyl-CoA dehydrogenase deficiency have been described. It is disappointing, therefore, to not have this corrected in the new edition of this text.

The highlight of the text is unquestionably the focus on clinical "pearls". Dr. Clarke laces his presentation of topics with so much accumulated clinical wisdom that it almost defies casual browsing. It is this distillation of the clinical essence of the field that is the great strength of this book and makes it a valuable resource for those looking for an entry point into the specialty. As such, it becomes almost the Harriet Lane Handbook for IEMs, and a must read for all clinical trainees, though it should not be viewed as a standalone text in this instance. It is likely to be less useful to laboratory trainees due to the previously mentioned choice for subject organization. Regardless, Dr. Clarke's text is a succinct book that rightly deserves to be on the front lines of metabolic medicine, and should be a welcome addition to the library of educator and student alike.

Jerry Vockley,
Rochester, Minnesota, USA

Vascular Cognitive Impairment. 2001. Edited by Timo Erkinjuntti, Serge Gauthier. Published by Martin Dunitz. 350 pages. C$145 approx.

A major change in the past decade has been the increasing recognition of mixed dementias, where vascular dementia coexists with other causes of dementia, particularly Alzheimer's disease. Mixed vascular dementia and Alzheimer's disease may account for up to half of all dementias and may be more common than any other single group. The overall impression expressed by the authors of this book is that progress in the field would be best served by moving away from vascular dementia, with all the historical baggage and confusion that accompanied it, and towards the broader concept of vascular cognitive impairment (VCI).

This multi-authored text with 80 different authors, five sections and 41 chapters, addresses topics on epidemiology, pathophysiology, diagnosis, neuroimaging, neuropsychological evaluation and treatment. Chapter 2 is an excellent, concise introduction to the concept of VCI. The authors make a very strong argument that VCI should be characterized prospectively and on the basis of fact, not preconception, in order to avoid the misconception contained within current criteria for vascular dementia. Current criteria (DSM IV, ICD-10, ADDTC, NINDS-AIREN, Swedish consensus) are sited repeatedly in numerous chapters. This may have been better dealt with by reference tables in an appendix.

In several chapters the frequency of various risk factors of vascular dementia such as heart disease, diabetes mellitus, smoking and inherited causes are described, as well as correlation between these risk factors and vascular disease. Chapter 5 and 6 provide concise, informative tables that summarize recent incidence and prevalence studies. These chapters include excellent tables compiling the main studies on the occurrence of poststroke dementia. Genetic factors related to microangiopathy related cerebral damage are clearly described. A few chapters describe various other subtypes including multi-infarct dementia, dementia due to strategic infarcts, subcortical ischemic disease, Binswanger's disease and cerebral amyloid angiopathy. These subtype outlines provide insightful clinically relevant material but a stand-alone chapter on CADASIL would have enhanced the usefulness of this book.

The major strength of this book may be the superb, clearly